

ITEMS

VOLUME 4 • NUMBER 4 • DECEMBER 1950
230 PARK AVENUE • NEW YORK 17, N. Y.

THE DARTMOUTH CONFERENCE ON LEARNING THEORY

*by the Members of the Conference **

ONE of the most active frontiers of contemporary psychology concerns the reduction of large masses of experimental data on the learning process to an adequately comprehensive and precise statement of the conditions under which learning occurs. This will involve a specification of the dependencies of classes of behavioral change upon classes of environmental variables, including those which have acted upon that organism in the past. From these dependencies between environmental events and behavioral changes, certain additional variables of a process or state character may be inferred. Since these variables are inferences from the observable events of the environment and the resultant behavioral changes, they are not, and indeed may never be, directly observed and as such they are variously termed intervening variables or hypothetical constructs. The specification of these variables, both environmental and intervening (or hypothetical), and the statement of their interrelationships with each other and with behavior will constitute the ultimate theory of the learning process. Learning theory, so conceived, is of central importance in psychology since it will contain all the laws governing the acquisition and loss, the strengthening and weakening of the acts of creatures. For this reason

many psychologists use the terms "learning theory" and "behavior theory" interchangeably.

At present there is no great agreement among psychologists as to the most profitable technique of theory construction. This is not to say that theory construction does not occur; it does, but the effect of the lack of agreement upon methods and objectives has been the statement of several alternative theories of the learning process. On the surface, at least, these theories differ from one another in many ways: in psychological science the sheer description of the dependent variable is capable of several solutions—pressing a lever may be described as one act or as five. Nearly all theorists have based laws of acquisition, strengthening, and deacquisition upon restricted sets of empirical data: rats running mazes, rats pressing levers, cats escaping from puzzle boxes, children cooperating in groups.

In the various formal theoretical statements the actual *situations* from which the laws are derived tend to vanish, leaving generalized laws of changes in response strength. These laws vary, from theory to theory, with the empirical domain to which the theorist originally restricted himself as a necessary matter of convenience. One consequence of the formal explication of theories which arise from narrow empirical domains has been the tendency for experimental investigation then to follow theory, and thus evolve ever more refined theories for that restricted domain. This practice tends at the same time to minimize checking one set of laws against the experimental facts handled by competing theories. The areas of conflict and agreement among theories have been further obscured by terminological confusions, in which similar terms have been given different definitions

* This conference was financed by a grant to the Council from the Carnegie Corporation of New York. Members of the conference, whose names appear on the following page, had been meeting informally since 1948. Their spontaneous collaboration in developing plans for a two-month working conference on theoretical research problems of mutual interest served to illustrate the potentialities of the inter-university summer research seminars, which were made possible by a grant to the Council from the John and Mary R. Markle Foundation and first held in the summer of 1950.

and similar definitions have been given different term names. For example, a term from the vernacular ("need") or from a related discipline ("stimulus") is taken over by several different theorists but given a different definition by each in the new context; or, conversely, a concept defined in the same way by several theorists may still be given a different name by each.

It seemed reasonable to a group of psychologists that theoretical progress might be made by a detailed consideration of the currently available theories *as theories*, rather than by additional accumulation of empirical evidence and apparently crucial experiments. It was believed that if the several terminologically disparate theories were carefully and systematically explored and compared as to empirical consequences, areas of agreement, of disagreement, and of empirical indeterminacy could more definitively be identified; the logical possibility of critical experiments could be evaluated; areas in which clarity of meaning is lacking could be exposed; unnecessary concepts could be discarded and semantic differences separated from real theoretical divergencies.

A conference which held these general aims met between June 19 and August 18, 1950, at Dartmouth College. The history of this group, its personnel, and method of operating will be set forth here; as far as is known, this conference was the first of its kind. The members were William K. Estes (Indiana University), Sigmund Koch (Duke University), Kenneth MacCorquodale (University of Minnesota), Paul E. Meehl (University of Minnesota), Conrad G. Mueller (Columbia University), William N. Schoenfeld (Columbia University), and William S. Verplanck (Indiana University, now at Harvard University).

Several of these psychologists had been brought together during the spring of 1948 in connection with another matter, and in the course of informal discussion the notion developed that the problems of current learning theory might be amenable to a collaborative treatment, which would take the form of a detailed analysis and comparison of certain representative learning theories. The goal was ambitious; it was clear that an opportunity for prolonged interaction, free from the routine demands of academic life, would be necessary. Accordingly, members of the group met in Boston in September 1948, during the American Psychological Association convention, to draw up a formal proposal outlining the goals of the projected conference. This proposal was submitted to the Social Science Research Council, with the sponsorship of A. T. Poffenberger; and funds were obtained to make possible a nine-week seminar devoted solely to the task at hand. Freedom to talk and to think theory during the period was maxi-

mized by selecting a meeting place at which outside contacts and commitments would be reduced for all members of the conference. Dartmouth College, through Dean Donald Morrison, generously offered the group its facilities, including meeting space and offices in its excellent library. The funds made available for the conference provided for the services of two graduate student assistants (Frances Clayton and Paul Hutt) and a secretary (John Courtney).

The group started spontaneously, and its composition was relatively homogeneous. All the members had evidenced interest in learning theory, but none had a strong partisan allegiance to any one of the current theories. Each had training and active research experience in theoretical and experimental psychology. They were of approximately the same age and academic rank.

The progress of the work at Dartmouth was considerably expedited by the fact that six months before they convened, during the Christmas holidays of 1949, all members of the group met to plan an agenda for the actual conference. At that time it was decided which of the learning theories would be included in the summer's work. A rather detailed statement of the bases upon which the several theoretical structures were to be considered and compared was evolved. This covered, among many things, the basic differences among theorists in their conception of the nature and goal of theory, adequacy with respect to a broad or a narrow range of data, utility of the theory for predicting behavioral outcomes of experimental operations, progress toward and amenability to mathematization, and other considerations. In addition, certain topics of a more general nature, such as a clarification of the nature of theory construction and an understanding of the principles underlying the use of a data-language which is neutral with respect to theory, were placed on the agenda as prerequisite to an unencumbered analysis of the individual theories in which they occur. The participants were able, on the basis of the agenda planning session, to undertake individual assignments from the larger outline for preparation in advance of the Dartmouth meeting.

The program evolved at the agenda planning session proved to be feasible at the summer meetings. At Dartmouth the mornings were given over to group discussions, most often and most productively based on statements prepared in advance; afternoons were spent in individual writing, library research, and preparation for projected morning sessions.

Obviously, only the most general summary of the outcomes of this conference can be given outside a detailed report of the issues treated. A series of discussions during the first portion of the conference enabled the group to

achieve substantial agreement upon important methodological assumptions underlying theory construction in psychology. Subsequently, rather exhaustive critical reviews of several influential learning theories was carried through, and finally a beginning was made at evaluating the extent to which a common theoretical framework is beginning to emerge from the diverse approaches to the systematization of learning phenomena. It is already clear that, if the subjective impressions of the conference members themselves are taken as a criterion, the protracted seminar method of attack on the

problems of analysis and comparison of theoretical issues can be a happy and productive one. It provides an opportunity to think and to talk about theoretical matters which far too often in the life of the academic psychologist must be postponed until the odd moments when everything else is done. The proper objective evaluation of the content of the discussions at Dartmouth must, of course, wait until they can be made public in detail. The group plans early publication of a monograph incorporating the methods and results of the cooperative review of learning theorists.

ECONOMIC EFFICIENCY: ITS MEANING, MEASUREMENT, AND APPLICATION TO AGRICULTURAL PROBLEMS

by Theodore W. Schultz

LET me offer a few observations on the interuniversity summer research seminar which the Social Science Research Council made possible last summer, under a grant from the John and Mary R. Markle Foundation, for a group of younger research workers in agricultural economics. This group met at the University of Chicago from June 26 to August 11, 1950. The core of the seminar program consisted of the preparation of a series of technical papers, their presentation and discussion during the summer, and then a reworking of the materials in light of the criticisms that were made.

I shall not attempt to give the substance of these papers nor the nature and significance of the criticism. The papers will be made available and in revising them, account has been taken of the critical discussion that emerged. I shall, instead, restrict this note to a few remarks on procedure, which I trust may prove useful to others in organizing similar intellectual ventures, a listing of the papers, and the apparent state of our knowledge in this area.

A WORD ON PROCEDURE

As it turned out, the participants had about three months to prepare their papers. A somewhat longer period would have been desirable. I am sure one or two persons found it difficult to free themselves from their "regular" duties sufficiently to concentrate on the preparation that was required.

I am convinced even more than I was at the outset that painstaking preparations by each participant before meetings of this kind get under way are absolutely essen-

tial. The hard thinking that really extends an intellectual frontier is done by an individual working an idea through by himself. When he has done this, he has something to communicate to his colleagues. Not much can be said for the notion that merely bringing a group together and providing opportunity for discussion will yield any useful results in studying research techniques in economics.

The seven-week period which this group had together is close to a maximum for this kind of intensive work. Despite the excellent weather, the members of the group were all quite fatigued.

THE ECONOMIC EFFICIENCY SERIES

A number of the following papers are scheduled to appear in technical economic journals and as parts of books. Others are still considered to be tentative and not for publication.¹

The first four papers listed below endeavor to resolve certain difficulties in the community preference concept and in gauging or "estimating" it. O. H. Brownlee's paper, however, goes beyond these issues and gives a representation of production possibilities and of choices and relations between them:

1. The Meaning of Economic Efficiency in Terms of "Possibilities" and Choices. O. H. Brownlee, Uni-

¹ The Social Science Research Council, however, has made it possible to reproduce a modest number of copies of each paper, and accordingly, individual requests will be met as long as the supply lasts. Requests should be addressed to: Office of Agricultural Economics Research, Social Science Building, University of Chicago, Chicago 37, Illinois.

versity of Chicago; now at the University of Minnesota.

2. The Place and Functions of Economic Research in a Democracy. John A. Baker, U. S. Department of Agriculture.
3. Certain Social Conditions of Economic Efficiency. Theodore W. Schultz, University of Chicago.
4. Efficiency, Justice, and Freedom. John M. Brewster, U. S. Department of Agriculture.

Each of the papers in the next group presents the formal economic elements required to analyze a particular type or class of problems:

5. Conservation and Interperiod Resource Efficiency (to appear in the *Journal of Political Economy*). Earl O. Heady, Iowa State College.
6. Efficiency in the Production of Marketing Services (to be expanded and published as a research handbook). Raymond G. Bressler, Jr., Giannini Foundation, University of California.
7. Risk and Uncertainty in Relation to Economic Efficiency (including research applications to yield uncertainty). P. J. Thair, U. S. Department of Agriculture and North Dakota State College.
8. Price Movements and the Utilization of Seasonal Farm Products. Lawrence W. Witt, Michigan State College.
9. Effect of Interfirm Relations on Economic Efficiency and Measurement. Winn F. Finner, U. S. Department of Agriculture.
10. Capital Formation in Agriculture. Earl O. Heady, Iowa State College.
11. The Scale of the Firm: Its Meaning, Measurement, and Usefulness in Research. David L. MacFarlane, MacDonald College.
12. The Aggregation of Producing Units in Agriculture in Analyzing Economic Efficiency. Kenneth L. Bachman, U. S. Department of Agriculture.
13. Decision Making: Its Importance for the Meaning and Measurement of Efficiency. George Tolley, University of Chicago.

The next two papers present the concept of a decision model and the role of statistical models.

14. Possibilities and Statistical Analysis. Clifford Hildreth, University of Chicago.
15. A Model of Farm Production. Clifford Hildreth.

The following two papers report certain research findings in addition to considerations bearing on research procedure. Both these papers are scheduled to be read before the American Economic Association meeting to be held jointly with the American Farm Economics Association in Chicago in December.

16. Relations between Availability of Capital and Production Innovations in Agriculture. W. E. Hendrix, Georgia Agricultural Experiment Station.
17. Functioning of the Labor Market. D. Gale Johnson, University of Chicago.

(Charles E. Bishop of North Carolina State College participated throughout the seminar sessions and prepared several of the discussions but not a major paper; Charles Hardin also participated; Herman Southworth and Richard O. Bean of the U. S. Department of Agriculture, and George Mehren of the University of California each appeared before the group.)

THE STATE OF RESEARCH

Clearly to make any headway in a program such as that of the seminar on economic efficiency in agriculture, there must be individuals who have done some significant work because it is impossible to make this kind of technical appraisal unless the materials are at hand. Several agricultural economists have concentrated on improving research techniques by adapting and applying the more general tools of theoretical economics and statistics to problems in agriculture.

A few words on the earlier efforts of the Council to help research workers in agricultural economics are needed to gain perspective at this point. From 1925 to 1942 the Council maintained an advisory Committee on Social and Economic Research in Agriculture and, upon its recommendation, from 1928 to 1933 administered a special fellowship program to develop trained workers in this field. This committee of distinguished individuals planned the "Scope and Method" series of bulletins outlining research problems and procedures in agricultural economics and rural sociology, which resulted in 21 publications (15 of these in agricultural economics) edited by John D. Black. Nor do these exhaust the list of Council activities in behalf of agricultural economics.

In assessing the state of research in this field today, I may be permitted to go back to my review of a decade ago of the "Scope and Method" series. I quote from the opening paragraphs:

A symptom of the immaturity of economics is the wide gap that separates theory and research. In economics, one might well be led to presume that the two approaches are strictly competitive rather than complementary and indispensable to each other. There is the burden of a long tradition of theory versus the empirical, the handicap of an intricate methodology, along with the "temperament" of outstanding teachers, all of which seem to conspire to continue the division of the house against itself. Surely this is a low state of affairs. All too little has been done to bring the two together. Any efforts to do so, even when elementary and cursory in character, should receive encouragement and

welcome. . . . Professor J. D. Black (in preparing this series) has addressed himself precisely to this problem of relating the formal aspects of economics to realistic studies.²

When one reflects on theory and empirical research in agricultural economics, one recognizes that there are a few individuals like those described by Samuelson as "highly trained athletes" who are always in training but never run a race.³ Many workers in the field, however, do not fully determine either the purpose or the most relevant procedures but simply undertake projects without adequate planning. The result is too much aimless research activity. The papers listed above and the discussions they provoked are a good index of the difficulties in research in agricultural economics. Let me call attention to several of the more important ones:

1. When the research worker turns from production activities, transformation functions, and production possibilities based primarily on technical conditions in farm management and marketing, and endeavors to relate these production activities to the preference of the community, he becomes confused. The concepts are not understood; and the process by which a community—be it markets, the political mechanism, or a slower moving cultural process—coordinates individual preferences is for him an area of social analysis in which he is a novice. Except for economic organizations dependent upon markets, this difficulty plagues all of economics, and the so-called "philosophical approaches" which are now current are essentially meaningless in resolving this difficulty.

2. Most research workers who have achieved a considerable command of economic theory, of both the micro and the macro branches, find it exceedingly difficult to adapt and use it in analyzing particular agricultural problems. This difficulty shows up in several ways: for some individuals the escape is that theory becomes an end in itself; for others, empirical analysis consists of looking for data that will illustrate the theory instead of drawing upon it to formulate hypotheses to get at the economic aspects of the particular problem. Some of the best trained and most competent younger men in this field realize with a good deal of discomfort that they have not overcome this basic difficulty.

² T. W. Schultz, "Scope and Method in Agricultural Economics Research," *Journal of Political Economy*, October 1939, p. 705.

³ See Paul A. Samuelson, *Foundations of Economic Analysis* (Cambridge: Harvard University Press, 1947), p. 4.

3. While real advances have been made during the last two decades in bringing economic theory to bear on agricultural problems, the procedures used in identifying the economic variables and in estimating their values are exceedingly crude. This is not to be taken as a criticism of research workers in agricultural economics as such but as a description of the state of theory and practice in statistical inference. All too little has been accomplished in this area although some promising work is under way.⁴

CONCLUSION

Looking back, it is my belief that the seminar group last summer made substantial headway in adapting economic theory to the analysis of agricultural problems. More specifically, the advances were made in formally representing the relevant economic elements of particular and important agricultural problems. We did not, however, have the time, nor is the groundwork laid, for specifying the research operations that are required to make useful estimates of the values of these economic variables and of the relations among them.

It is quite plain that there is an additional task that very much needs to be done. Another project of this kind or some comparable undertaking is required to take stock of what can be learned from current estimating procedures. But it will be necessary to go beyond traditional statistical techniques to get at the values represented in the economic formulation of agricultural problems that is now possible. In this area we have at best merely scratched the surface. Yet it will be difficult to do more until new work in statistical inference is brought to bear.

The tangible product of the summer seminar at the University of Chicago for the present is restricted to the papers listed above, several of which deserve careful study by those doing research in this field. The intangible benefits are not to be underestimated, although they can hardly be listed here since they have gone, in the first instances, to those who participated. The returns on this phase of this research investment must be sought and will be found in the future research output of the members of the seminar.

⁴ See, for example, Tjalling C. Koopmans, ed., *Statistical Inference in Dynamic Economic Models* (New York: John Wiley & Sons, 1950), Cowles Commission Monograph No. 10.

AWARDS TO SOCIAL SCIENTISTS UNDER THE FULBRIGHT

PROGRAM, 1949-1951

THE Social Science Research Council, as a member of the Conference Board of Associated Research Councils, participated in the establishment in 1948 of the joint Committee on International Exchange of Persons which since that time has cooperated, under the guidance of the Conference Board, in the administration of the Fulbright program. The committee is specifically charged with the screening of "professors, specialists and research scholars" for Fulbright program awards.

The availability of these awards is determined by the negotiation, by the Department of State, of agreements with countries in which surplus war material assets remained for disposition at the close of World War II. It is further controlled by the necessity of obtaining the approval of proposed types of appointments by the educational foundations set up under the Fulbright program in each of the countries affected, as well as of a specific educational institution within the country. An appre-

ciable, and gradually increasing, number of research or teaching opportunities for social scientists has developed in the course of the administration of the Fulbright Act.

As an indication of the scope and variety of opportunities thus provided there follows a list of appointments made during the past two years. The awards under the 1950-51 program for the most part began during the past autumn or are scheduled to begin in the course of the winter. Those under the preceding year's program similarly varied in effective date, due to variations in academic years abroad or in other circumstances affecting the appointments. A very small number of additional appointments under this year's program are still in negotiation. Inquiries regarding possible openings and appointments for 1951-52 should be addressed to the Executive Secretary of the Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C.

AWARDS UNDER THE 1950-51 PROGRAM

<i>Name</i>	<i>Home institution</i>	<i>Type *</i>	<i>Institution abroad</i>	<i>Field or subject</i>
Babbitt, Adeline	Veterans Administration, Hawaii	L	State Training College for Teachers, Burma	Psychology
Bakkum, Glenn A.	Oregon State	L	American University, Cairo	Rural sociology
Bascom, William R.	Northwestern	R	University College, Ibadan, Nigeria	Ethnological study of the Yoruba
Becker, Howard	University of Wisconsin	L	University of Birmingham	Sociology
Blake, Robert R.	University of Texas	L	University of Reading, England	Psychology
Boardman, Eugene P.	University of Wisconsin	R	University of Hong Kong	Chinese communism
Boorstin, Daniel	University of Chicago	L	University of Rome	American history and civilization
Bowen, Ralph H.	Columbia	R	University of Paris	French history
Caplow, Theodore	University of Minnesota	L	University of Bordeaux	Sociology
Chamberlin, Edward	Harvard	L	University of Paris	Economics
Cometti, Elizabeth	Marshall College	L	University of Rome	American history
Condliffe, J. B.	University of California	R	Cambridge	Economics
Cox, Frederick J.	University of Alabama	R	Fouad I University, Cairo	History
Cutshall, Alden D.	University of Illinois	R	University of the Philippines	Economic geography
de Grazia, Sebastian	University of Chicago	R	University of Florence	Stability of political loyalty
Embree, John F.	Yale	R	Ecole Francaise Extreme Orient, Hanoi	Community and acculturation study in Laos
Fernbach, Alfred P.	University of Virginia	R	University of Oslo	National policy and international organization
Filler, Louis	Antioch	L	University of Bristol	American history and civilization
Furber, Holden	University of Pennsylvania	L	University of Madras	History
Galenson, Walter	Harvard	R	University of Oslo	Norwegian labor movement
Ginsburg, Norton	Ohio State	R	Universities of Malaya, and Hong Kong	Geography of trade functions
Glaser, Robert	University of Kentucky	L	State Training College for Teachers, Burma	Psychology
Hardacre, Paul H.	Vanderbilt	R	University of London	English history
Hastings, Margaret	New Jersey College for Women	R	University of London	History
Helms, E. Allen	Ohio State	L	Oxford	Political science
Hexter, Jack H.	Queens College	R	University of Paris	History
Hoffman, Lawrence A.	Johns Hopkins	R	University of Bombay	Geography
Hohman, Helen F.	University of Chicago	L	University College of South- ampton, England	Economics
Hovde, Bryn		R	University of Oslo	Scandinavian history
Howard, Clinton F.	U. C. L. A.	L	University of Nottingham	American history

* R, research award; L, lecturing.

Hoyt, Elizabeth	Iowa State College	R	Makerere College, Uganda	Economic and social effects of cultural change
Hyman, Herbert	National Opinion Research Center	L	University of Oslo	Social psychology
Kidner, Frank L.	University of California	L	University of Leiden	Economics
Leontief, Wassily	Harvard	R	University of Paris	Economic analysis
Lindgren, Raymond	University of Minnesota	R	University of Oslo	Scandinavian history
McNeill, William H.	University of Chicago	R	University of London	International relations
Moss, William W.	William and Mary	R	University of Manchester	Political science
Mowry, George E.	State University of Iowa	L	University of Strasbourg	American history
Mund, Vernon A.	University of Washington, Seattle	L	University Institute of Economics and Commerce, Venice	Economics
Nicols, Alfred	U. C. L. A.	R	University Institute of Economics and Commerce, Venice	Economic efficiency in postwar Italy
Nimkoff, Meyer F.	Florida State University	R	University College of West Indies	Negro family organization
Orr, Kenneth	University of Chicago	L	University of Rangoon	Subsistence patterns and cultural currents
Perkins, Whitney T.	University of Denver	R	University of Amsterdam	Effects of political independence of Indonesia
Reynolds, Robert	University of Wisconsin	R	University of Genoa	History
Schilz, Gordon B.	Oklahoma Southeastern State College	L	University College, Mandalay	Geography
Schwartz, Bernard	New York University	R	University of Paris	Law
Shafer, Boyd C.	University of Arkansas	R	University of Paris	French federation movement from 1790
Stephenson, W. H.	Tulane	L	University of Birmingham	History
Storing, James A.	Colgate	L	University of Oslo	American government and politics
Sydnor, Charles S.	Duke	L	Oxford	History
Tate, Merze	Howard	L	Vsya-Bharati, Santiniketan, Bengal	Political science
Topping, Peter W.	University of California, Santa Barbara	R	American School of Classical Studies, Athens	History
Vogt, William		R	University of Oslo	Human ecology
Wennberg, Samuel G.	University of Missouri	L	Norwegian School of Business, Economics and Administration, Bergen	Economics
Whittlesey, Derwent	Harvard	R	Makerere College, Uganda	Human geography
Ylvisaker, Paul N.	Swarthmore	R	University of London	Administrative responsibility in English government

AWARDS UNDER THE 1949-50 PROGRAM

<i>Name</i>	<i>Home institution</i>	<i>Type *</i>	<i>Institution abroad</i>	<i>Field or subject</i>
Beers, Howard W.	University of Kentucky	L	Superior School of Agriculture, Athens	Rural sociology
Binkley, Wilfred	Ohio Northern	L	Oxford	Political science
Braden, Samuel E.	Indiana	R	University of London	Economics
Broom, Leonard	U. C. L. A.	R	University College of West Indies, Jamaica	Social differentiation in the B.W.I.
Carbone, George	University of Mississippi	R	Universities of Milan, and Rome	Liberal movement in North Italy, 1846-48
Chamberlin, Edward	Harvard	L	University of Paris	American economic thought and research methods
Cressey, Paul	Wheaton	R	University of Rangoon	Sociological study of Rangoon
Dashiell, Samuel	Eastern Washington College of Education	L	University of Rangoon	Geography
Dodge, Guy H.	Brown	R	University of Paris	French liberalism since the Revolution
Eggan, Fred	University of Chicago	R	University of the Philippines	Social and cultural anthropological survey
Eliot, Thomas D.	Northwestern	R	University of Oslo	Sociology; Norwegian culture
Fertsch, Pauline	University of Texas	L	University of the Philippines	Psychology
Gooch, Robert K.	University of Virginia	R	University of Paris	Political science
Gray, Robert F.	University of Chicago	R	Makerere College, Uganda	Anthropological study of native tribes
Heiden, Noland R.	University of Michigan	R	University of Oslo	Urban geography
Hillman, W. Arthur	Roosevelt College	R	University of Oslo	Sociology
Hoyt, Robert S.	State University of Iowa	R	Victoria University	History
Jackson, W. T.	University of Chicago	L	University of Glasgow	American history
Jensen, Merrill	University of Wisconsin	L	Oxford	American history
Jones, Edward S.	University of Buffalo	R	University of the Philippines	Psychology
Kaplan, A. Abbott	U. C. L. A.	R	College of France	French labor movement since World War II

* R, research award; L, lecturing.

Krech, David	University of California	L	University of Oslo	Social psychology
Lach, Donald F.	University of Chicago	R	University of Paris	Impact of Far East on Western civilization
Lowrie, Seldon	University of Cincinnati	L	University of New Zealand	Political science
McGinley, James	Fordham	L	Ateneo de Manila	Economics
Meier, Richard	University of Chicago	R	University of Manchester	Economics
Miller, Perry G.	Harvard	L	Oxford	American history
Miner, Horace	University of Michigan	R	University of Algiers	Culture changes among Arabs
Nasatir, Abraham	San Diego State College	R	Institut de Recherche et d'Histoire des Textes	French archival materials relating to American history
Neal, Fred W.	New York State Department of Education	R	University of Paris	History of political social relationships between East and West Europe
Peck, George T.	Lehigh	R	University of Naples	Political science; land reform and its effects
Pelzer, Karl J.	Yale	R	University of the Philippines	Human geography and land utilization
Roach, William J.	University of Pennsylvania	R	Institut de Recherche et d'Histoire des Textes	History
Rodnick, David		R	University of Oslo	Behavior patterns of Norwegian people
Rostow, Eugene	Yale	L	University of Paris	Public law for the control of national economy
Russell, Roger	University of Pittsburgh	R	University of London	Abnormal behavior under stress
Savelle, Max	University of Washington, Seattle	R	University of Paris	History
Schlatter, Richard	Rutgers	L	Oxford	American history
Schneider, David	Harvard	L	University of London	Anthropology
Sherwood, Foster	U. C. L. A.	R	Oxford	Current British administrative procedure
Silver, James	University of Mississippi	L	University of Aberdeen	American history
Sturmthal, Adolf	Bard	R	University of Lyon	European labor movements during war
Taylor, Wallace W.	State College for Teachers, Albany	L	University of Bergen	Social studies
Turney-High, Harry	University of South Carolina	R	University of Liège	Rural Walloon culture
Vaughan, Floyd L.	University of Oklahoma	L	University of London	Economics
Wager, Walter	Northwestern	R	University of Paris	International law and policy
Warren, Sidney	University of Florida	L	University of Durham	American history and government
Webb, Louie W.	Northwestern	L	University of Bristol	Psychology
Wyatt, Donald	Fisk	R	University of Paris	Sociology; recent changes in French North Africa

COMMITTEE BRIEFS

CENSUS MONOGRAPHS

Ralph G. Hurlin (chairman), Robert W. Burgess, J. Fred-eric Dewhurst, William F. Ogburn; *staff*, Eleanor Bernert.

The committee met on November 29 to review their tentative recommendations to the Bureau of the Census on areas of analysis which might be covered in a program of monographs based on 1950 and earlier census data. Ways of as-uring preparation of an appreciable number of these monographs are being explored by the committee, whose activities are financed through the cooperation of the Russell Sage Foundation. The areas tentatively selected are listed below (they do not include recommendations for monographs in the field of housing since these are being submitted by the Committee on Housing Research):

The aged population of the United States
The child and youth population
Differential reproduction

Differential social characteristics of the white and non-white population

Economic areas of the United States

Educational attainment

Families in the United States

The foreign-born and ethnic population groups

The growth of metropolitan areas

Growth of population in the United States

Income structure in the United States (Family income might be treated in this monograph, or separately.)

Institutional population of the United States

Internal migration

The labor force in the United States (This monograph might include an analysis of labor force trends, structure of the labor force and women in the labor force, or each of these might comprise a separate monograph.)

Levels of living and social stratification in the United States

The location of economic enterprise and its relation to population

Occupational and industrial distribution of the labor force

The social characteristics of farm, village, town, and urban populations (The analysis of each of these subgroups might comprise a separate monograph.)

The social characteristics of the territories and possessions of the United States

The structure of American agriculture (The monograph might include an analysis of the agricultural labor force, farm wages, farm mortgage debt, farm tenure, farm rentals and values, farm mechanization, type and size of farm. Each topic or a less comprehensive combination of topics might also comprise a monograph.)

Trends in manufacturing.

ECONOMIC HISTORY

Arthur H. Cole (chairman), Carter Goodrich, Earl J. Hamilton, Herbert Heaton, John G. B. Hutchins, Harold A. Innis, Leland H. Jenks, Edward C. Kirkland, Frederic C. Lane.

The committee was appointed in 1940, with support from the Rockefeller Foundation for a five-year program which became lengthened to ten years as a consequence of delays in activity occasioned by the war. As this program neared completion, the committee sought and secured incorporation under the laws of the District of Columbia as a continuing research organization. The committee is now established upon what is hoped may be a long-continuing basis.

The Council has received a supplementary grant for continuation of certain committee activities during the current fiscal year to aid the committee in its transition to independent operation.

HISTORIOGRAPHY

Ralph E. Turner (chairman), S. H. Brockunier (secretary), Eugene N. Anderson, Shepard B. Clough, Thomas C. Cochran, Elmer Ellis, Bert J. Loewenberg.

Upon Mr. Turner's return to this country in September after a year's absence, plans were made for completion of the committee's report on social science approaches to history. During the winter of 1948-49 the committee held a series of conferences with representatives of other fields on the applicability of their concepts and methods in historical research. Several members of the committee have since drafted reports on convergences of history with these allied fields and on problems in the development of history as a social science. These reports and summaries of the conference discussions are being integrated by the chairman in a general report, which is scheduled for critical reading by the committee and consultants in the spring.

HOUSING RESEARCH

Ernest M. Fisher (chairman), Charles S. Ascher, Jacob H. Beuscher, Howard G. Brunsman, Nicholas J. Demerath, Robert K. Merton, Robert B. Mitchell, Richard U. Ratcliff, Arthur M. Weimer, Coleman Woodbury; *staff*, Leo Grebler.

A meeting of the committee on December 1-2 in Washington, D. C., was devoted to preparations for a research

conference scheduled for May 1951, and to consultative work on analytical cross-tabulations and monographs dealing with the 1950 census of housing, which is carried on under contract with the Bureau of the Census as reported in the September issue of *Items*.

The research conference will deal with the role of social science research in housing design and will bring together social scientists and designers for the formulation of research objectives and methods that will help planners to meet unsolved problems of design. The two principal subjects will be "Social Relations in the Design of Housing" and "Changing Patterns of Family Behavior and the Design of Nonhousing Facilities."

The committee reviewed a draft report on the census project and decided to recommend preparation of the following census monographs:

Housing expenditure patterns

Residential financing

Housing and the structure and growth of residential neighborhoods

Nonfarm housing in the United States

Intensity of utilization of housing

Evaluation of housing census concepts and quality of returns

Housing patterns of minority groups

Housing patterns by age and family groups

Farm housing in the United States

Measuring the quality of housing

Trends and characteristics of home ownership

Estimates of housing for intercensal dates.

INTERNATIONAL COOPERATION AMONG SOCIAL SCIENTISTS

Roy F. Nichols (chairman), Robert C. Angell, Frederick S. Dunn, Robert B. Hall, Otto Klineberg, Donald Young; *staff*, Bryce Wood.

The committee met on September 13 and on November 11, primarily to consider the need and possibilities for research on the evaluation of programs of international exchange of persons. A preliminary memorandum by Guy Metraux of Yale University on evaluation of international cultural relations with reference to the interchange of students and research personnel was discussed. Mr. Metraux was subsequently invited to prepare for the committee, with the guidance of Wendell C. Bennett, a historical survey of the scope and objectives of exchange programs which might merit further analysis.

LABOR MARKET RESEARCH

Dale Yoder (chairman), E. Wight Bakke, J. Douglas Brown, Philip M. Hauser, Clark Kerr, Charles A. Myers, Gladys L. Palmer, Carroll L. Shartle; *staff*, Paul Webbink.

In January the Bureau of the Census, in cooperation with the committee, will undertake a household enumeration in six cities to obtain data on work histories covering a ten-year period. A household schedule will be used to record the age, sex, and marital status of all members of the household, and current job information for all persons 14 years of age and over. A work-history schedule will be used to

obtain a ten-year work record from all persons 25 years and over who held a job for one month or more in 1950. The schedules were pretested in a survey of 160 households in Philadelphia in September and modified on the basis of the experience gained.

The sample of households to be canvassed in January is expected to provide about 2,400 work histories in each of the cities—Chicago, Los Angeles, New Haven, Philadelphia, St. Paul, and San Francisco. The aim is to obtain information on how workers in certain occupations became employed in them, the importance of wages as an incentive in changing jobs, and the ease with which workers change jobs. The analysis will stress factors in the mobility of the labor force of larger cities and job sequence patterns in selected occupational groups. The Bureau of the Census will carry out

the enumeration and tabulate the data. The committee, through the aid of university research centers, will be responsible for analysis of the data and preparation of the reports.

SOCIAL IMPLICATIONS OF ATOMIC ENERGY AND TECHNOLOGICAL CHANGE

Ansley J. Coale (chairman), Harold J. Barnett, J. Frederic Dewhurst, Tjalling C. Koopmans, Wassily W. Leontief, W. Rupert Maclaurin.

"Social Implications of Technological Change: A Research Planning Report" by Yale Brozen of Northwestern University has been reproduced in mimeographed form for use by research workers in this field. Copies may be obtained upon request to the New York office of the Council.

PERSONNEL

RESEARCH TRAINING FELLOWSHIPS

At a meeting on October 28 the Committee on Social Science Personnel—Edward P. Hutchinson (chairman), Donald T. Campbell, William W. Howells, Earl Latham, Frank A. Southard, Jr., and Paul Webbink—awarded the following research training fellowships:

Robert M. Darrow, Ph.D. candidate in history, Columbia University, Lecturer in History, College of the City of New York, for sociological training and research on the history of recent activities of a political pressure-group.

Bernard Kaplan, Ph.D. candidate in psychology, Clark University, for training in linguistics and research on factors influencing the comprehension of verbally communicated ideas.

William J. Keefe, Ph.D. candidate in political science, Northwestern University, for a study of the role of political parties in the legislative process of the Illinois General Assembly.

Forrest McDonald, Jr., Ph.D. candidate in American history, University of Texas, for study and research in United States constitutional history.

Albert F. Wessen, Ph.D. candidate in sociology, Yale University, for research on the social structure of a typical large American hospital.

Charles M. Westie, Ph.D. candidate in sociology, Ohio State University, for research on reactions of railroad workers to technological change.

AREA RESEARCH TRAINING FELLOWSHIPS AND TRAVEL GRANTS

At a meeting on November 10 the Committee on Area Research Training Fellowships—Philip E. Mosely (chairman), Merle Fainsod, Robert B. Hall, Melville J. Herkovits, Roy F. Nichols, Lauriston Sharp, Charles Wagley—awarded the following fellowships:

James B. Christensen, Ph.D. candidate in anthropology, Northwestern University, and Fulbright scholar at

University College of the Gold Coast, for research on the culture of the Fanti.

Stanley Diamond, Ph.D. candidate in anthropology, Columbia University, a postdoctoral fellowship for research in Palestine on the cultural readjustment of settlers.

Lawrence S. Finkelstein, Ph.D. candidate in international law and relations, Columbia University, for research in Indonesia and adjacent areas on the passing of colonialism.

Alexander Kucherov, Ph.D. candidate in history, Columbia University, for research in the United States on N. G. Chernyshevsky's economic and political thought in relation to present-day Soviet reality.

John C. Messenger, Jr., Ph.D. candidate in anthropology, Northwestern University, for research in Africa on the acculturation of the Ibibio.

Jack Minkoff, Ph.D. candidate in economics, Columbia University, for research in the United States on the State Planning Commission (Gosplan) of the U.S.S.R.

Forrest R. Pitts, Ph.D. candidate in geography, University of Michigan, for research in Japan on land and agriculture in the Inland Sea region.

Henry Rosenfeld, Ph.D. candidate in anthropology, Columbia University, a postdoctoral fellowship for research in Palestine on the cultural readjustment of settlers.

The following travel grants were awarded:

Howard Becker, Professor of Sociology, University of Wisconsin, for study of interrelations of personality and social structure in selected Hessian villages.

Shepard B. Clough, Professor of History, Columbia University, for research in France, Italy, and Germany on West European economic history.

John K. Fairbank, Professor of History, Harvard University, for research in Japan on the Japanese understanding of modern Chinese history.

Edward W. Fox, Associate Professor of History, Cornell University, for research in France on social and eco-

conomic conflicts underlying political developments, 1895-1914.

Robert G. Neumann, Assistant Professor of Political Science, University of California at Los Angeles, for research in France on political parties since the liberation.

Marvin K. Opler, Associate Professor of Anthropology, Stanford University, for anthropological research in Burma and adjacent areas.

Benjamin Rivlin, Instructor in Political Science, Brooklyn College, for research in France and French North Africa on current political affairs.

Mischa Titiev, Associate Professor of Anthropology, University of Michigan, for research in Japan on social change in selected rural communities.

APPOINTMENTS TO COUNCIL COMMITTEES

A new Committee on Migration Differentials was appointed in October to serve as an advisory body in the preparation by Everett Lee of a revision of Council Bulletin 43, *Research Memorandum on Migration Differentials*, by Dorothy S. Thomas. This revision involves a review and appraisal of the relevant literature on internal migration which has appeared since the publication of Bulletin 43 in 1938, as initially recommended by the Committee on Economic Growth. The members of the committee are: Dorothy S. Thomas of the University of Pennsylvania (chairman), Donald J. Bogue of the Scripps Foundation for Research in Population Problems, C. Horace Hamilton of North Carolina State College, Edward P. Hutchinson of the University of Pennsylvania, and Henry S. Shryock, Jr. of the Bureau of the Census.

Douglas M. Whitaker, Dean of Graduate Study at Stanford University and newly appointed Chairman of the National Research Council, and Arthur S. Adams, former President of the University of New Hampshire and newly appointed President of the American Council on Education, have succeeded Detlev Bronk and George F. Zook, respectively, as members of the Conference Board of Associated Research Councils.

Herbert J. Herring, Dean of Trinity College, Duke University, and Bryce Wood of the Social Science Research

Council, have been appointed members of the Conference Board's Committee on International Exchange of Persons, succeeding George S. Counts and Richard H. Heindel, respectively.

Shepard B. Clough of Columbia University has been appointed to the Committee on Economic Growth for the year 1950-51.

Egerton L. Ballachey of the University of California at Berkeley has been named a member of the Pacific Coast Committee on Community Studies.

M. Bruce Fisher of Fresno State College has been appointed to the Pacific Coast Committee on Old Age Research.

Jacob Yerushalmy of the University of California School of Public Health has been appointed to the Pacific Coast Committee on Social Statistics.

A new Subcommittee on the *Current Digest of the Soviet Press* has been appointed under the joint Committee on Slavic Studies of the ACLS and SSRC. The members of this subcommittee are Ernest J. Simmons of Columbia University (chairman), Cyril E. Black of Princeton University, Merle Fainsod of Harvard University, and Philip E. Mosely of Columbia University. The Subcommittee on Procurement of Soviet Materials as reconstituted consists of Merle Fainsod (chairman), H. H. Fisher of Stanford University, Robert J. Kerner of the University of California, Geroid T. Robinson of Columbia University, and Avraham Yarmolinsky of the New York Public Library.

COUNCIL STAFF

Richard H. Heindel, a member of the Council staff since October 1, 1949, on November 20, 1950 became Deputy Director of the UNESCO Relations Staff, U. S. Department of State.

Bryce Wood, Associate Professor of Political Science at Swarthmore College (on leave), succeeds Mr. Heindel as Council staff particularly concerned with development of the Council's activities in the fields of international cooperation, international exchange of persons, and area research. Mr. Wood's headquarters will be in the Washington office of the Council.

PUBLICATIONS

SSRC BULLETINS AND MONOGRAPHS

Area Research: Theory and Practice, Bulletin 63, by Julian H. Steward. August 1950. 184 pp. \$1.50.

Culture Conflict and Crime, Bulletin 41, by Thorsten Sellin. 1937; reprinted September 1950. 116 pp. \$1.00. This bulletin was reprinted at the suggestion of a group of teachers and research workers in the field of criminology, following repeated requests for copies while it was out of print.

Tensions Affecting International Understanding: A Survey of Research, Bulletin 62, by Otto Klineberg. May 1950. 238 pp. Paper, \$1.75; cloth, \$2.25.

Production of New Housing: A Research Monograph

on Efficiency in Production by Leo Grebler. February 1950. 195 pp. \$1.75.

Labor-Management Relations: A Research Planning Memorandum, Bulletin 61, by John G. Turnbull. October 1949. 121 pp. \$1.25.

The Pre-election Polls of 1948: Report to the Committee on Analysis of Pre-election Polls and Forecasts, Bulletin 60, by Frederick Mosteller, Herbert Hyman, Philip J. McCarthy, Eli S. Marks, David B. Truman, with the collaboration of L. W. Doob, Duncan MacRae, Jr., F. F. Stephan, S. A. Stouffer, S. S. Wilks. September 1949. 416 pp. Paper, \$2.50; cloth, \$3.00.

The Council's bulletins, monographs, and pamphlets are distributed from the New York office of the Council.

BOOKS

Economic Aspects of Atomic Power: An Exploratory Study under the direction of Sam H. Schurr and Jacob Marschak. Prepared by the Cowles Commission for Research in Economics; initiated by the Council's former Committee on Social Aspects of Atomic Energy. Princeton: Princeton University Press, 1950. 315 pp. \$6.00.

Studies in Social Psychology in World War II, Vol. I, *The American Soldier: Adjustment During Army Life* by S. A. Stouffer, E. A. Suchman, L. C. DeVinney, S. A. Star, and R. M. Williams, Jr.; Vol. II, *The American Soldier: Combat and Its Aftermath* by S. A. Stouffer, A. A. Lumsdaine, M. H. Lumsdaine, R. M. Williams, Jr., M. B. Smith, I. L. Janis, S. A. Star, and L. S. Cottrell, Jr.; Vol. III, *Experiments on Mass Communication* by C. I. Hovland, A. A. Lumsdaine, and F. D. Sheffield; Vol. IV, *Measurement and Prediction* by S. A. Stouffer, Louis Guttman, E. A. Suchman, P. F. Lazarsfeld, S. A. Star, and J. A. Clausen. Prepared under the auspices of the Committee on Analysis of Experience of Research Branch, Information and Education Division, ASF. Princeton: Princeton University Press, 1949. Vol. I, 612 pp.; Vol. II, 676 pp.; together, \$13.50; separately, \$7.50. Vol. III, 356 pp., \$5.00. Vol. IV, 766 pp. June 1950. \$10.00.

The Public Library in the United States: The General Report of the Public Library Inquiry by Robert D. Leigh (282 pp., August 1950, \$3.75); *The Library's Public* by Bernard Berelson (194 pp., \$3.00); *The Public Library in the Political Process* by Oliver Garceau (281 pp., \$3.75); *Government Publications for the Citizen* by James L. McCamy (153 pp., \$2.50); *The Book Industry* by William Miller (170 pp., \$2.75); *The Information Film* by Gloria Waldron (299 pp., \$3.75). Prepared under the auspices of the Public Library Inquiry Committee, the last-named volume in cooperation with the Twentieth Century Fund. New York: Columbia University Press, 1949.

The Corporation in New Jersey: Business and Politics, 1791-1875 by John W. Cadman, Jr. Published in cooperation with the Committee on Economic History. Cambridge: Harvard University Press, 1949. 479 pp. \$6.00.

Steamboats on the Western Rivers: An Economic and Technological History by Louis C. Hunter. Published in cooperation with the Committee on Economic History, the American Historical Association, and the American Council of Learned Societies. Cambridge: Harvard University Press, 1949. 699 pp. \$10.00.

Wartime Industrial Statistics by David Novick and George A. Steiner. Prepared with the aid of the Council's former Committee on War Studies. Urbana: University of Illinois Press, 1949. 242 pp. Paper, \$2.00; cloth, \$3.00.

PAMPHLETS AND MEMORANDA

Effective Use of Social Science Research in the Federal Services. Prepared with the assistance of the Council. New York: Russell Sage Foundation, 1950. 47 pp. 50 cents.

A Directory of Social Science Research Organizations in Universities and Colleges by the Committee on Organization for Research. June 1950. 40 pp. Obtainable from the New York office of the Council.

Memorandum on University Research Programs in the Field of Labor 1950 by the Committee on Labor Market Research. 70 pp. Photo-offset. Obtainable from the New York office of the Council.

The Present Position of Foreign Area Studies in the United States: A Post-Conference Report by Richard H. Heindel. Sponsored by the Committee on World Area Research. November 1950. 64 pp. Mimeographed. Obtainable from the New York office of the Council.

Research on Aging: Proceedings of a Conference Held on August 7-10, 1950, at the University of California, Berkeley edited by Harold E. Jones, Chairman of the Conference. Sponsored by the Pacific Coast Committee on Old Age Research. December 1950. 131 pp. Mimeographed. Obtainable from the New York office of the Council.

ANNOUNCEMENT

DIRECTORY OF COUNCIL FELLOWS

The Council, aided by a grant from the Rockefeller Foundation, is engaged in the preparation of a new directory of its fellows which will supplement and bring up to date the earlier directory published in 1939. The forthcoming volume will include biographical sketches on the more than 975 persons appointed to fellowships since 1925. Sketches are now being prepared from information submitted by the fellows and copy is being mailed to them for verification. It is hoped that the directory will be published in the summer of 1951.

SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE, NEW YORK 17, N. Y.

Incorporated in the State of Illinois, December 27, 1924, for the purpose of advancing research in the social sciences

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